



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The Royal Society of London

PHILOSOPHICAL  
TRANSACTIONS

Volume 8  
1673

*Reprinted by permission of*  
*The Royal Society of London*

JOHNSON REPRINT  
CORPORATION

KRAUS REPRINT  
CORPORATION

NEW YORK  
1963

The Royal Society of London

PHILOSOPHICAL  
TRANSACTIONS

Volume 8  
1673

*Reprinted by permission of  
The Royal Society of London*

JOHNSON REPRINT  
CORPORATION

KRAUS REPRINT  
CORPORATION

NEW YORK  
1963

*The only official reprint  
authorized by  
The Royal Society of London*

PHILOSOPHICAL  
Transactions :  
GIVING SOME  
A C C O M P T  
OF THE  
Present Undertakings, Studies and Labours  
OF THE  
I N G E N I O U S  
IN MANY  
Considerable Parts  
OF THE  
W O R L D.

---

VOL. VIII.  
*For the Year M DC LXXIII.*

---

London,  
Printed by T.R. for John Martyn, Printer to the Royal Society ;  
at the Bell in St. Pauls Church-Yard.

# The INDEX for this Eighth Volume of the Year 1673.

The first Figure refers to the Number of the Tracts; the <sup>nd</sup>, to the Page.  
Note, that, by a mistake, p. 6000. immediately follows p. 5199.  
and holds on all along.

## A.

**A**IR, with relation it has to Flame and towards Explosions, and the *Flamma vitalis*. See M. Boyle n. 92. *Air's Moisture, and its Effects*, Mr. Boyle n. 97.

*Amber-greecæ*, a Vegetable excretion.

97. 6137.

*Anatome*. Some Animals that have Lungs, are yet found to be without the Arterious veins, 94. 6040. *De nasi-cornis scarabæi genitalibus*, *ibid* by Dr. Swammerdam. Mr. Lister on the same, and of the Chyle and Guts, *ibid*. Stones 38 found in a man's bladder, some considerably great. Another Drum, besides the known one, discover'd in the Ear: See *Mengoli* in Books, n. 100.

*Astronomy*. A discovery of two more Planets about Saturn, and their motions observed by Signor Caffini, 92. 5176. *Jupiter* accurately observed by Mr. Flamstead, to determin his inclination to the Ecliptick, 94. 6033. Observations of the same concerning the extreameſt Elongations of the exterior Jovialists from the center of Jupiter, 96. 6094. Of the Planets diameters and distances from the Fixed: And of the Parallax of Mars Acronic and Perige, *ibid*. n. 96. Of the appulses of the Moon and other Planets to the Fixt Stars, predicted for the Year 1674. n. 99. 6162.

## B.

**A** Bee-hive used in Scotland with good success, to save the Bees from swarming, 96. 6076.

The *Blood-stanching liquor* proved, 94. 6039. & 95. 6052. 6074. & 96. 6078.

*Books*. Th. Bartholini *Acta Medica & Philosoph. A. 1671. & 1672. n. 97. 6135.*

Mr. Boyle on the Relation between Flame and Air. It. about Explosions. His Hydrostatal discourses against Dr. More and Mr. Sinclair. 92. 5197. The same, of the strange Subtlety, Efficacy, and Determinate nature of Effluviums: Of the parts of Fire and Flame made stable and ponderable; and forced to pass through Glass, and there arrested and weighed, 96. 6101. The same, Tracts about the Saltneſs of the Sea; a Statical

Hygroſcope and its Uſes; the Force of the Airs moisture; of the Natural and Preternat. state of Bodies; a Sceptical dialogue about the Positive or Privative nature of Cold, 97. 6127. The force of Freeſing, *ibid*.

Dr. Edw. Browns Travels in Hungaria, Servia, Bulgaria, Macedonia, Thessalia, Austria, Stiria, Carinthia, Carniola, Friuli, 94. 6049.

*Antoni's Egel Apologema pro Urinis humanis*, 99. 6175.

Dr. Fairfax of the Bulk and Selvage of the World, 99. 6172.

*Antoni's le Grand Historia Naturæ*, 94. 6046.

Dr. Grew's Idea of a Phytological History: A continuation of the Anatomy of Vegetables; and first of Roots, and of their Vegetation, 97. 6131.

M. Du Hamel de Corpore Animato, 98. 6151.

Job. Hevelii *Machinæ cælestis pars prior, Organographiam Astronomicam, plurimis Iconibus exornatam exhibens*, 99. 6171.

Th. Hobbs, *Principia & Problemata aliquot Mathematica, anté desperata, nunc breviter explicata & demonstrata*, 97. 6131.

Chr. Hugenii *Horologium Oscillatori-um*, 95. 6068.

Mr. Kersey's Elements of Algebra ad-vanced, 95. 6073.

*Mengoli Musica Speculativa*, n. 100.

Sir Jonaſ More of modern Fortifica-tions, 95. 6071.

Sir Sam. Moreland's description and use of two Arithmet. Instrum. 94. 6048.

P. Pardies de la Statique, 94. 6042.

Job. Portius; Vini Rhenani, in pri-mis Baccharacensis, *Anatomia Chymica*, 93. 6019.

Franc. Redi, *Experienze intorno à di-verse cose naturali*: In which he ex-amins many Medicinal matters, and wa-ters, of greatest fame, and finds many false reports: Glass-bullets, &c. tried in the stomach of pullers, ducks, pigeons. Glass-drops, Jewels, Metals, thus tried: The Torpedo, and many other rarities consider'd, 92. 6001.

# The INDEX.

*If. Veffiu de Formatum canu & viribus Rhinum,* 93. 6024.

*Georg Wedeli Specimen Experimenti novi de Sa e V. Halli Planarum,* n. 100.

*To Weissi Distrriba de Medicam. Operationibus in Humanis corporibus in which he deduceth all the Operations from Mechanical principles,* 99. 6151.

*Buildings; the choice of Stones and other Materials; and a proposal for retrieving the Art of hardning Steel to cut Porphyre.* 63. 6010. C.

**C**old and its force; whether of a positive or privative nature. See *Boyle* in Books.

*Colours and Light:* The Theory of these discussed afresh between Mr. Newton and a Parisian, 95. 6089, and 97. 6107.

*Coral,* what it is, whether a vegetable or mineral. 90. 6138. D.

**D**rawing: A new manner of delineating by parallel rays, to an Orthographical equality, the gesture, situation, and whatever habit of human bodies, keeping the proportion of parts, 96. 6079. E.

**E**ar, described by Mengoli in Books. Another Drum, besides the known one, discover'd in the Ear. See Anatomy.

**F**ishing; a pleasant way of catching Carps, by Mr. Templer, 95. 6066.

*Frost,* the strange Freezing about Christmas-time 1672, to the destruction of Trees and quick Hedges, with sudden heats observ'd in Somersetshire, confirmed in the main by Dr. Wallis from *Oxon*, 92. 5126.

**G**ranaries; the effects of Thundering and Lightnings observ'd in the Granaries of Dantzick, 96. 609.

**H**earing; See Mengoli in Books.

**M**agnetical Variations and Inclinations undertaken to be explicated by Mr. Bond, 93. 6065.

*Mathematick.* A Demonstration of the Vibrations made in a Cycloid, 94. 6. 87. Monsieur Slusius his manner of drawing Tangents to any Curve; absq; calculo, 95. 6059. The first Invention and Demonstration of the Equality of the Curve line of a Paraboloid to a Straight line affested to M. William Neile from the pretences made by some for Henrat: And the finding a Straight line equal to that of a Cycloid and to the parts the cof, affested to Sir Chr. VVren, 98. 6146.

*Medical* considerations. Much studying and disconning supposed to hinder Concoction, and to destroy health, 96. 6093.

*Medicis;* their Operations deduced from Mechanical principles. See *Willis* in Books.

*Medical Communications from Turkey;* the maladie of Aleppo, the plague of Constantiopolis, fever. Opium how used there to cure Holes, of the Grecian of the gout, 93. 6017.

*Metals* how far improved in Gunnery by a certain powder, 97. 6049.

*Minerals;* odd substances discovered in Eng. & Irish Mines, n. 100.

*Monsters:* A monstrous and very strange Human fetus at Paris, 99. 6157.

*Mountain of Ice in Helvetia* describ'd and represented, n. 100.

*Musick;* the Natural History thereof, n. 100.

O.

**O**piates: See *Willis* in Books. Opium how used in Turkey; See *Medical Communications*.

*Opticks:* A specimen of Microscopical Observations, with the figures, made in Holland. Item, M. Slusius and M. Hugenius about Alhazens problem de puncto reflexione in speculis concavis and convexis, 97. 6119, & 98. 6140.

P.

**A** Powder which will sometimes fulminate, sometimes not, 92. 6003. A powder very beneficial in casting of Guns, 94. 6049.

R.

**R**arities of chief fame examin'd, see *Redi* in Books.

*Rott in Sheep,* its remedy, n. 100.

S.

**Salt:** The principles and causes of the volatilisation of Salt of Tartar, and other Salts, by Dr. Van der Beck, 92. 5189.

*Ships;* their Hulls how to be preserved from worms, &c, by a new, cheap and durable way, n. 100.

*Snow;* the nature and figures of it, by Dr. Grew, 92. 5193.

*Stones* of great fame examined: See *Redi* in Books. Many stones, o the number of 38, greater and smaller, found in a mans bladder, 99. 6155. Snake-stones, Egg-stones, Diamonds, Topaz, Bohemian Jasper, Porphyre, Pearl, examined; See the Book of *Redi*, Stones figur'd like Plants, n. 100.

T.

**T**hunder and Lightning, the Effects thereof upon Granaries. See *Granaries*.

*Turky leather;* the manner how dressed in Turkey, 93. 6017. See there other Communications from Turkey.

*Tides;* their peculiar Current about the Oracles, 98. 6139.

*Tobacco poyon.* See Books, *Redi*.

*Torpedo;* how stupifying, *ibid.*

V.

**V**egetables: Root-grafting commended by Experience, 93. 6067. The Cacao and Chocolate tree; the way of its curing and husbandry, &c. 93. 6007. Vegetables of great fame examined, *Redi*.

*Virginia's* advantage for building Ships, 93. 6015. Veins in Plants, 95. 6060.

Vines advantaged by the roof of an house, 93. 6016. W.

**W**ood: Pimenta di Ciapi, the Root della Manique, Sassafras, the Root John Lopez Pineiro, the Laetaceous plant of Cambaja, Calamba-wood, Vanillas, Wood of Lahor and Sotol, Peuvian bark, &c. examined. See *Redi* in Books.

*World;* the bounds of it by Dr. Fairfax. See him in Books.

FINIS.

# PHILOSOPHICAL TRANSACTIONS.

---

March 25. 1673.

---

## The C O N T E N T S.

A Preface to this Ninth Year. *A Discovery of two New Planets about Saturn, made by Signor Cassini.* An Extract of a Letter of Dr. Von der Beck to Dr. Langelot concerning the Principles and Causes of the Volatilisation of Salt of Tartar and other Fixed Salts. Some Observations touching the nature of Snow, presented to the R. Society by Dr. Grew. A Confirmation of what was deliver'd in Numb. 90. about the Strange Freezing in Somersetshire. An Accompt of two Books: I. *Tracts written by R. Boyle Esquire, containing New Experiments touching the Relation betwixt Flame and Air, and about Explosions: An Hydrostatical Discourse occasion'd by some Objections of Dr. More; to which is annex't an Hydrostatical Letter, about a Way of Weighing water in water: New Experiments, of the Positive or Relative Levity of Bodies under water; of the Air's Spring on Bodies under water; and about the Differing Pressure of Heavy Solids and Fluids.* In which Accompt is occasionally inserted the Publisher's Reply to Mr. George Sinclair's Paper, called a Vindication of the Preface of his *Ars Nova & Magna Gravitatis & Levitatis.* II. *Experienze intorno à diverse cose Naturali, fatte da Francesco Redi.*

Y y y y y

The

# PHILOSOPHICAL TRANSACTIONS.

May 19. 1673.

## The C O N T E N T S.

*A Demonstration of the Synchronisme of the Vibrations made in a Cycloid, given by a Person of Quality. An Extract of Mr. Flamsteads Letter, containing some more accurate Observations of Jupiter, useful for determining that Planets Inclination to the Ecliptique. A Specimen of some Microscopical Observations lately made in Holland. An Extract of a Letter from M. Denys, giving notice of an admirable Liquor, instantly stopping the Blood of Arteries prickt or cut, without any suppuration, or without leaving any scar or cicatrice. A Description of the Uses of a certain Powder for yielding a very close and smooth Mettal, and of easier carriage, &c. Extracts of two Letters of Dr. Swamerdam, concerning some Animals, that having Lungs are yet found to be without the Arterious Vein; together with some other curious particulars. An Accompt of some Books: I. LA STATIQUE, on la Science des Forces Mouvantes; par le P. Ignace Gaston Pardies. II. Antonii le Grand HISTORIA NATURÆ. III. The Description and Use of two ARITHMETICK INSTRUMENTS; together with a short Treatise, explaining and demonstrating the Ordinary Operations of Arithmetick; as likewise a Perpetual Almanack, and several Useful Tables; by S. Moreland. IV. A Brief Account of some Travels in Hungaria, Servia, Bulgari, Macedonia, &c. by Edward Brown M.D.*

# PHILOSOPHICAL TRANSACTIONS.

---

June 23. 1673.

---

## The C O N T E N T S.

*Experiments of a present and safe way of staunching by a Liquor the Blood of Arteries as well as Veins; made both in London and Paris. Monsieur Slusius his easy way of demonstrating his Method of drawing Tangents to all sorts of Curves without any labour of Calculation. A Note of Dr. Wallis upon Mr. Listers Observation concerning the Veins in Plants. Mr. Listers Letter taking notice of Dr. Wallis's remarque, and withal containing some Anatomical Observations and Experiments touching the Unalterable Character of the Whiteness of the Chyle within the Milky vessels; together with divers particulars observ'd in the Guts. The Undertakings of Mr. Henry Bond concerning the Variation and Inclination of the Magnetique Needle. Some Observations upon a pleasant way of catching Carpes, by Mr. John Templer. An easy way of raising Fruit-trees to what numbers any desires, by Mr. Lewis. An Accompt of some Books: I. Christiani Hugenii HOROLOGIUM OSCILLATORIUM: II. Sr. Jonas More's MODERN FOR-TIFICATION: III. The Elements of that Mathematical Science, call'd ALGEBRA, by John Kersey.*

# PHILOSOPHICAL TRANSACTIONS.

July 21. 1673.

## The C O N T E N T S.

*A Description and Representation of a Bee-house useful to prevent the Swarming of Bees ; used in Scotland with good success.*  
*An Account of the success of the Experiments, promised at the end of the next precedent Transactions. A New way of Orthographically delineating by parallel visual rays the postures and the actions of an Humane body, exactly observing the symmetry and proportion of the parts ; by Mr. John Saint-Clare.*  
*An Extract of a Letter written by an Ingenious person from Paris, containing some new Considerations upon Mr. Newtons doctrine of Colours ; as also upon the Effect of the different Refractions of the Rays in Telescopical Glasses. Mr. Newtons Answer to that Letter, further explaining his Theory of Light and Colors, and particularly his Doctrine of Whiteness ; together with his continued hopes of perfecting Telescopes by Reflexions rather than Refractions.*  
*A relation from Dantzick, of an uncommon Case in Physick ; and another from the same place, about an odd effect of Thunder and Lightning upon Wheat and Rye in the Granaries of that City.*  
*A Letter of Mr. Flamsteed to Signor Cassini, containing some New Observations, made after a new and accurate way, of the farthest E'ongations of the Medicean Stars from the Center of Jupiter ; together with some other un-common ones concerning the Diameters of the Planets and their Distances from Fixed Stars, as also of the Parallax of Mars, &c.*  
*An Account of a Book: viz. Several Tracts written by the Honourable Robert Boyle, of the strange Subtlety, Efficacy, and Determinate nature of EFFLUVIA'S ; of New Experiments to make the parts of FIRE and FLAME stable and ponderable ; together with some Additional Experiments about Arresting and Weighing of Igneous corpuscles ; as also a Discovery of the Perviousness of Glas to Ponderable parts of Flame, &c.*

# PHILOSOPHICAL TRANSACTIONS.

---

For the Months of *August, September and October.*

*Octob. 6. 1673.*

---

## The C O N T E N T S.

*Extracts of two Letters, the one of Mr. Newton, concerning the Number of Colors, and the Necessity of mixing them all for the production of White, &c; the other, of a Philosopher at Paris, by way of Answer to the former. A Letter of the Honorable Robert Boyle concerning the Vegetable nature of Amber-Greece, according to an Extract taken out of a Dutch East-Indian Journal. A Letter about the success of the Royal Styp-tique water in the Fleet. The Figures of some New Microscopic Observations, together with the Description of them, concerning some parts in Bees, not discover'd before. Some Letters exchanged between Monsieur Slusius and Monsieur Hugenius, about a considerable Optic Problem of Alhazen. An Account of four Books : I. Tracts consisting of Observations about the Saltiness of the Sea; an Account of a Statical Hygroscope and its Uses; an Appendix about the Force of the Air's moisture; as also a Discourse of the Natural and Preternatural State of Bodies; by Robert Boyle Esq; To all which is promised a Sceptical Dialogue about the Positive or Privative nature of Cold, by a Member of the R. Society. II. Principia & Problemata aliquot Geometrica, anté desperata, nunc breviter explicata & demonstrata, Auth. T. H. Malmesburiensi. III. An Idea of a Phytological History; together with a Continuation of the Anatomy of Vegetables, particularly of Roots; and an Account of the Vegetation of Roots; by Nehemiah Grew M.D. and Fellow of the R. Society. IV. Thomæ Bartholini Acta Medica & Philosophica.*

Qq q q q q

*Extracts*